



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,678	12/01/2003	Kazuhide Nagao	36309	2375
116	7590	11/16/2005	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			ARBES, CARL J	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/724,678	NAGAO ET AL.	
	Examiner	Art Unit	
	C. J. Arbes	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>herein</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 3729

Applicants' response and election filed on or about 29 August 2005 has been carefully reviewed and is held to be proper and correct. In view of this holding and further in view of Applicants' response thereto the Office's Restriction is now **made Final**. Applicants therefore are required to cancel all non-elected claims or take other appropriate action.

An Office Action on the merits of Claims 1-10 now follows.

Claim 1 recites the limitation ...for moving the mounting heads in line 6 of Claim 1. There is insufficient antecedent basis for this limitation in the claim. Hence claims 1-10 are held to be insufficient or vague and unclear.. As applied to claims 3, 4, 8 and 9 it is held that the language ...for storing a distinction data for indicating ...(claims 3 and 8) and ...according to the distinction data... (claims 4 and 9) is so vague, unclear and abstruse as to render these claims devoid of meaning. What does this language mean? And what do these claims mean?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, assuming that these claims are clear and definite, are further rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (Pat. No 5,724,722); hereinafter Hashimoto. Hashimoto teaches an electric part mounting apparatus which holds an electronic part. The holding means includes a nozzle, a head moving device, an image recognition system (37 and 39), provided on the mounting

Art Unit: 3729

heads, illumination by a light source elected from a plurality of different light sources (45, 47 and 43) (Cf. Col 6), and a controller (Cf. *inter alia* 36 Fig 4). It is also clear at least from Figure 4 that there exists a recognition system for each of the coordinates X, Y, Z and R wherein position detection means are provided for each of these coordinates. The issue is then if Hashimoto teaches or suggests a storage means for storing offset values when position correction is made during the positioning based on values from the recognition means. It is seen from studying Columns 6 and 7 and reading Pat No 5,384,956 which is incorporated by reference into Hashimoto (the current teaching) that the controller (35) will make calculations which determine position corrections during the positioning and based on the result of the recognition means. Hence it is held to be obvious to provide an offset values storage, given the Hashimoto teaching, if in fact Hashimoto does not expressly teach such an offset value storage means *per se*. As applied to claims 2 and 7, Hashimoto teaches a light source which reflects illumination (Cf. at least Claim 10) as well as a light source which transmits illumination. (Cf. at least Claim 7). As applied to claims 3 and 8 it is held that the controller 36 would act as a mounting data storage for storing data gathered from one of the transmission recognition system and the reflection illumination system. As applied to claims 4 and 9 it is held to be mere design choice to select either the transmission or the reflection illumination inasmuch as Applicants provide no specific purpose therefore nor solve a particular problem therewith.

Art Unit: 3729

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563.

The examiner can normally be reached on M, T, R and F from 8 to 6.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



C. J. Arbes  
Primary Examiner  
Art Unit 3729